JYOTI SINGH   **1900100100073,FEMALE**

Computer Science & Engineering   **UG Final Year , B.Tech**

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Examination	Institute	Year	CPI / %
Graduation	UNITED COLLEGE OF ENGINEERING AND RESEARCH	2023	70(till 6th sem)
Intermediate/+2	MPVM GANGA GURUKULAM	2018	86.40
Matriculation	MPVM GANGA GURUKULAM	2016	93.20

KEY PROJECTS

3D TIC TAC TOE   Summer 2021

- Applied principles of **object oriented programming** by using **classes to encapsulate and abstract the board**. This allowed us to change the internal representation of the board, without changing rest of the code. The size and the difficulty were also abstracted.
- Used **higher ordered functions** to implement a function that tells whether the current state is a win.
- Implemented **Minimax algorithm** as the AI agent in the game.

N-QUEENS VISUALISER   Summer 2022

- Learnt fundamental **concept of recursive** calling to fill a queen in safe place.This helped us to monitor and check the position of Queen
- Implemented **code optimisation** to by acknowledging the movement of queen, rotation of chessboard and other variations for distinct solutions
- Solved an **artificial intelligence** problem by dividing it into sub problems, also designed the game board.

BINARY TREE VISUALISER   Spring 2022

- Implemented programming concept of **binary tree**, max heap using HTML, CSS and JavaScript.
- Conceptualised **hierarchal data structure**,with the help of array representation •Applied algorithms and programming knowledge for constructing in well-defined way.

OTHER PROJECTS

SUDOKU SOLVER   Summer 2020

- Applied the concepts of backtracking algorithm,by analysing various **permutations**
- Solved by using function oriented approach alongwith recursive calls to reach a valid matrix solution.

SHORTEST PATH FINDER   Summer 2021

- Implemented using Dijkstra's algorithm,learnt backend working
- Learnt code optimisation and approach for problem solving,applied graph theory to reach from source to destination

WEB DEVELOPMENT   Summer 2022

- Optimized the layout of the TinDog website to ensure useability on small screens,made **responsive** websites like MusicOnline,applied **layout designing** using containers and relative positioning,made my Portfolio website
- Implemented a **simplified** version **backtracking** programming. Learnt **frameworks** like bootstrap, react.js for making it dynamically efficient and made projects like contact manager

ACADEMIC ACHIEVEMENTS

• Android With Core Java: **Prutor IITK Technology** licensed after submitting final internship project.

• Web Development Bootcamp**: Udemy** certified after completing the 90%lectures.

• Ethical Hacking: **Scored 100% in Internshala** Summer Training

• Computer System Security: **E & ICT Academy**, IIT Kanpur certified.

TECHNICAL SKILLS

Programming Languages	C, C++,Python, SQL, Core Java.
Web Development	HTML, CSS, JavaScript,php,jQuery,Reactjs,Nodejs,Firebase
Software Skill	MATLAB, Eclipse,Codeblocks, Intellij IDEA Java IDE, Android Studio,MS- Office,

Webflow,Wordpress,Firebase,AWS.

KEY COURSES

•Design and Analysis of Algorithms	•Artificial Intelligence
•Software Engineering	•Operating Systems
•Web Technology	•Calculus
•Discrete Mathematics	•Data Structures and Algorithms
• Computer Architecture	•Database Management System
•Embedded System	•Digital Logic Design
•Compiler Design	• Theory of computer Automation
•Object Oriented Programming	• Image Processing
•Computer Networks	•Linear Algebra

EXTRACURRICULARS

•Under National Cadet Corps Welfare scheme: taught underprivileged kids; recorded Hindi news audio books, as part of Voice for Purpose.

•Wrote a few answers on Quora, started personal blogging site; improved content writing.

•Participated in Volleyball, Tug of war, and secured gold medal, during inter-college competition.